Trends in Demographic, Family Planning, and Health Indicators in Ghana

Ghana Statistical Service

DHS

Demographic and Health Surveys
Macro International Inc.

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1960-1993

Ghana Statistical Service
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Macro International Inc.
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Contents

1 Introduction

This report highlights important trends in key population, family planning, and health indicators in Ghana over the past two decades. In particular, the report addresses the prevailing demographic situation and describes trends in fertility, family planning, maternal and child health as well as infant and child mortality. It was prepared with the primary objective of providing information needed by policy makers and programme administrators to assess the current situation and to design more effective population, family planning, and maternal and child health programmes.

Data Sources

Historically, the earliest method of demographic data collection in Ghana was the population census; this data-gathering activity dates back to the pre-colonial era when traditional rulers conducted prototypes of modern population censuses in order to know the population of their realm and the numbers of fighting men. The first of the population censuses conducted during the British Colonial Administration took place in 1891. After that, decennial censuses were regularly organized until 1941 when the Second World War disrupted the series and necessitated a postponement to 1948.

Ghana became an independent country in March, 1957, and the first modern census was conducted in 1960. Two other censuses have been conducted since that time in 1970 and 1984. In addition, basic demographic data were collected in a number of surveys including the Post Enumeration Survey (1960), Supplementary Enquiry (1970), Ghana Fertility Survey (1979-80), three rounds of the Ghana Living Standards Survey (1987/88, 1988/89, and 1991/92), and two rounds of the Ghana Demographic and Health Survey (1988 and 1993).

Three of these surveys—the Ghana Fertility Survey (GFS) and the Ghana Demographic and Health Surveys (GDHS)—serve as the principal data sources for this report. Details of these surveys are provided in Appendix A. Although the GFS and the GDHS surveys were implemented by the same institution, differences in the data collection methodology and estimation methods among these surveys affect the comparability of some results. In a few instances, such differences also limit the types of indicators for which trends are examined in this report.

The report begins with a brief description of current population, family planning, and health policies and programmes in Ghana, including targets, goals and achievements. Information is then presented on key demographic, social, and economic trends. The remaining sections of the report deal with trends in other important demographic and social variables, including marriage, fertility, family planning, and maternal and child health.

Population and Family Planning Policies and Programmes

Ghana's population has grown rapidly during this century. The population, which was projected at 16.3 million in 1993, is estimated to be growing at a rate of about 3 percent. The young age structure of the population (48 percent of the population is less than 15 years old and only 4 percent is 65 years

old or more) is a result of the high rate of growth. The populations' youthful character will provide the momentum for rapid increases in Ghana's population in the future unless deliberate steps are taken to reduce fertility.

The sheer size of Ghana's population is not so much a concern as its rate of growth. The country's rapid population growth poses an obstacle to providing basic social services and achieving significant economic growth. A concern that rapid population growth would retard economic progress led Ghana to adopt an explicit and comprehensive population policy in 1969. The policy rested on the premise that unless birth rates could be brought down to parallel falling death rates, Ghana's population would reach a level harmful to continuing prosperity. Without slower growth, it was assumed that the children of future generations would be born into a world where their very numbers might condemn them to a life-long poverty.

Although the 1969 policy was retained by successive governments, very little progress was made during the following two decades in reducing the rate of population growth because the political commitment was absent. In 1994, Ghana's population policy was revised in recognition of the fact that the socio-economic conditions at the time were quite different from those prevailing in 1969 when the original policy was drafted. The new policy seeks to ensure that Ghana will achieve and maintain a level of population growth which would be consistent with national development.

The government's long-term vision (Ghana-Vision 2020) for the country is to attain a balanced economy as well as a middle-income status and standard of living by the year 2020. The National Development Policy Framework (NDPF) recognizes the negative impact that a continuing high rate of population growth would have on the achievement of the development targets proposed in the programme. It sets a goal to reduce the population growth from its present level of around 3 percent to 2 percent per annum so as to allow real income per head to rise to more than four times the level in 1993.

A commitment to increasing family planning practice is considered basic to the achievement of the NDFP's goals. In Ghana, a wide gap exists between the knowledge of family planning and the level of contraceptive practice. Efforts are therefore being made to expand the availability of family planning services in public facilities and enhance the capabilities of private agencies providing these services.

Health Priorities and Programmes

The overall objective of national health policy is to improve the health status of all Ghanaians. In 1993, the average life expectancy at birth in Ghana was 56 years, which represents a considerable improvement over the 1957 level of 45 years. Life expectancy at birth is heavily influenced by the rates of infant and under-five mortality, which were estimated at 66 and 119 per 1000 live births, respectively, in 1993. The relatively high childhood mortality is due to an amalgam of various factors, especially the lack of protection from preventable diseases. To address the latter issue, the Ministry of Health has been pursuing a policy to achieve universal child immunization.

Other factors that contribute to ill health and low child survival in Ghana include lack of access to safe drinking water, insanitary living conditions and poor nutrition. To deal with these problems, policies have been put in place to effectively control risk factors that expose individuals to the major communicable diseases; reduce the incidence of water-borne and other environmental diseases arising from insanitary practices and inadequate housing; eradicate child malnutrition; increase access to health services, especially in rural areas; establish a health system which is effectively reoriented toward delivery of public health services; and strengthen the overall management of the health system.

2 Demographic, Social, and Economic Indicators

Population Growth and Spatial Distribution

As noted, Ghana's population has been growing rapidly. During the 27-year period between 1921 and 1948, the country's population almost doubled, from 2.2 million to 4.1 million (Figure 2.1). In 1960, the population of Ghana had reached 6.7 million, and, by 1984, it had increased to 12.3 million, triple its size in 1948 and nearly doubled its 1960 size. The population continued to expand throughout the 1980s and early 1990s; by 1993, there were an estimated 16.3 million people in Ghana, an increase of 4 million, or 33 percent, over the population in 1984.

In terms of absolute size, the Ashanti Region was the most populous region in Ghana throughout the period between the 1960 and 1984 censuses (Table 2.1). In 1984, 17 percent of the total population was living in Ashanti. Upper West, which had less than 4 percent of the total population in 1984, was the smallest region.

Table 2.1 shows the growth in the population at the regional level during the period between the 1960 and 1970 censuses and between the 1970 and 1984 censuses. During the period 1960-1970, the Greater Accra, Northern, Ashanti and Brong Ahafo Regions grew at a rate faster than the national average (2.4 percent). During the period 1970-1984, the Greater Accra and Northern Regions had the highest growth rates, followed by Brong Ahafo and Western.

Finally, Ghana's population is predominantly rural. However, the increasing urbanization of the country's population is among the more significant demographic trends evident during the period 1960-1993. The proportion of the population living in urban areas grew from 23 percent at the time of the census in 1960 to 34 percent at the time of the second GDHS in 1993 (Figure 2.2).

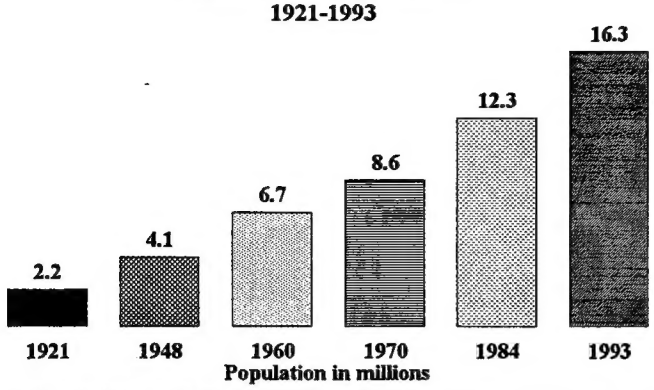
Social and Economic Indicators

The economy of Ghana is mixed, consisting mainly of a small, capital intensive, modern sector involving mining and a few manufacturing establishments; a growing informal sector of small businessmen, artisans and technicians; and a large, traditional agricultural sector made up mostly of small-scale peasant farmers. The agricultural sector alone absorbs three-fifths of the country's labour force and accounts for more than half (51 percent) of the Gross Domestic Product (GDP).

After independence, the economy was at its worst during the decade preceding 1983, with the GDP growing at a negative rate of 0.5 percent between 1975 and 1982. The Economic Recovery Programme (ERP) was introduced in 1983 in an effort to halt the deterioration of the economy and stabilize the macro-economic framework. The programme was successful, and Ghana achieved a remarkable annual increase of 5.2 percent in the GDP during the period from 1984 to 1993.

One of the more important indicators of economic and social development in a country is the educational level of its population. Moreover, education, especially of women, is closely associated

Figure 2.1
Size of the Population
1921-1993



Note: The 1921 census did not cover the whole of present Ghana. The 1993 figure is based on population projections.

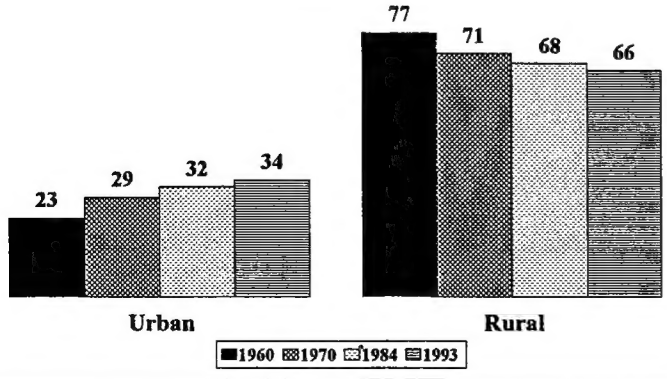
Ghana's population is growing rapidly.

Between 1970 and 1984, growth rates were higher than the national average in Western, Greater Accra, Brong-Ahafo and Northern Regions.

Table 2.1
Population Size and Intercensal Growth Rates by Region
1960-1984

	Population Size (in thousands)			Growth rate	
Region	1960	1970	1984	1960-1970	1970-1984
Total	6701	8339	12296	2.4	2.6
Western	625	770	1158	2.1	3.0
Central	725	890	1142	1.7	1.8
Greater Accra	542	852	1431	5.2	3.4
Eastern	1044	1262	1681	1.5	2.4
Volta	777	947	1212	2.0	1.8
Ashanti	1109	1482	2090	2.9	2.3
Brong Ahafo	587	767	1207	2.7	3.3
Northern	532	728	1165	3.2	3.4
Upper West	289	320	438	1.0	2.3
Upper East	469	543	773	1.5	2.6

Figure 2.2
Percent Distribution of the Population by Urban-Rural Residence
1960-1993



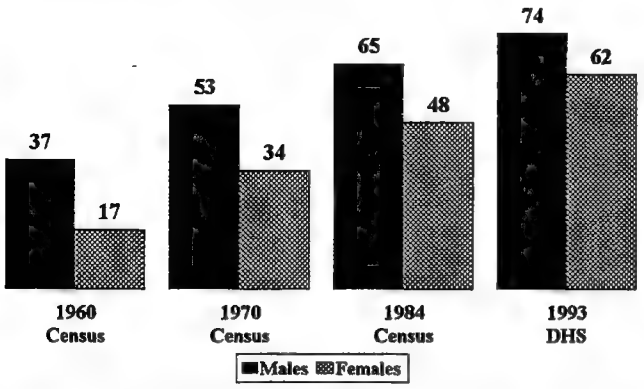
Ghana is becoming more urbanized.

with a number of the key indicators for which trends are examined in this report, including fertility, use of contraception and the health status of children. There have been substantial improvements in educational levels since the country's independence as more children take advantage of the opportunities to attend school. Figure 2.3 shows that only 37 percent of males and 17 percent of females aged 6 years and over had ever attended school in 1960. By 1970, 53 percent of males and 34 percent of females had attended school. The figures from the 1984 census showed further improvement, with 65 percent of males and 48 percent of females recorded as ever attended school. Finally, at the time of the 1993 GDHS, 74 percent of males and 62 percent of females were reported to have ever attended school.

The trends in school attendance are important not only because they show clear overall gains in education for Ghana's population, but also because they document a narrowing in the gap between males and females. Although more males than females attended school between 1970 and 1993, female attendance levels improved at a somewhat faster pace than male rates during the period. As a result, the male/female gap in school attendance rates narrowed noticeably.

Data from the GFS and the GDHS surveys can be used to look in more detail at changes in educational attainment among women in the reproductive ages 15-49. As Figure 2.4 shows, the percentage of women 15-49 with no education fell from 52 percent in 1979/80 to 35 percent in 1993 while the proportion with 1-6 years of schooling increased from 11 percent in 1979/80 to 18 percent in 1993. The increase in the proportion of women with 7-10 years of schooling was similar in absolute terms to that experienced in the 1-6 year category, although it was much smaller in relative terms. Figure 2.4 also shows that the proportion of women with 11 years or more of schooling nearly doubled between 1979/80 and 1993. Despite these gains, fewer than 1 in 12 women in the reproductive ages in Ghana has completed the secondary level or higher.

Figure 2.3
School Attendance among Males and Females
1960-1993

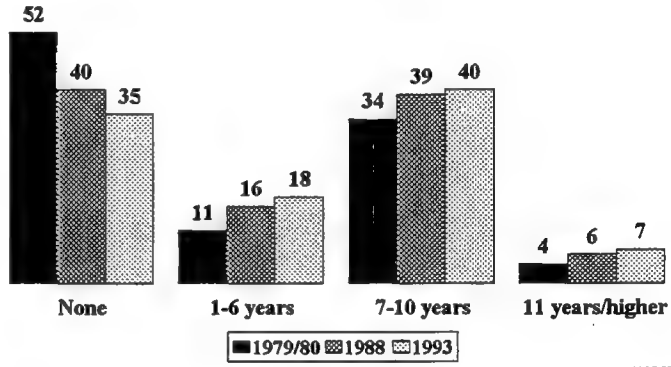


Percentage of population 6 years and over ever attending school

The proportions of males and females who have ever attended school have increased rapidly since 1960.

Despite the gains in female education, fewer than 1 in 12 women 15-49 in Ghana has completed secondary school.

Figure 2.4
Percent Distribution of Women 15-49
by Years of Schooling
1979/80-1993



3 Household Characteristics

Household characteristics such as housing conditions and ownership of consumer durables serve as indirect indicators of a household's standard of living. Trends in these characteristics reflect a society's material progress, which has implications for both its economic well-being and for maternal and child health. This section examines the relationship between household characteristics and women's welfare.

Housing Characteristics

Figure 3.1 presents data on the trend in the percentages of women 15-49 who were living in households with piped drinking water or electricity by urban-rural residence. Overall, between 1988 and 1993, there was an increase of 4 percentage points in the households with piped drinking water. In both periods, the percentage of women living in households with piped drinking water in urban areas was almost 6 times that in rural areas.

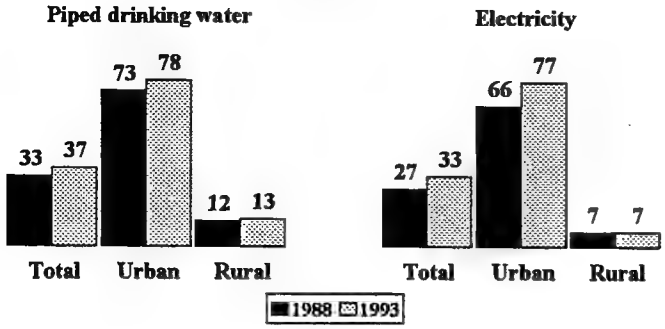
The proportion of women living in households with access to electricity increased from 27 percent in 1988 to 33 percent in 1993. All of the improvement was in urban areas, where the percentage of women living in households with access to electricity increased from 66 to 77 percent between 1988 and 1993. In contrast, in rural areas, the proportion of households living in households with electricity (7 percent) remained constant between 1988 and 1993.

There is also a considerable gap between urban and rural households in the availability of toilet facilities. Figure 3.2 shows that, for the country as a whole, both the proportion of women living in households with a flush toilet and those living in households without any toilet facility remained virtually unchanged between 1988 and 1993. Considering the trends for urban-rural areas, there was almost no change in the proportion with flush toilets in either urban or rural areas. There was a decrease in the proportion of households without any toilet facility in urban areas, but the proportion increased slightly in rural areas.

Exposure to Mass Media

Another important household socio-economic indicator is the ownership of radios and televisions. Research has shown that radio and television can be a powerful tool not only for creating awareness about new technology but also for stimulating people's desires for more information and facilitating their efforts to apply the information to their own behavior. Families who own a radio or television are likely to have greater exposure to health education messages about the management of common childhood diseases, infant feeding practices, and the importance of vaccinating young children. The percentage of women 15-49 living in households that owned a radio increased slightly from 41 percent in 1988 to 44 percent in 1993. Television was only available in 9 percent of households in 1988 whereas in 1993, 17 percent of households had a television set (Figure 3.3).

Figure 3.1
Household Amenities
by Urban-Rural Residence
1988-1993

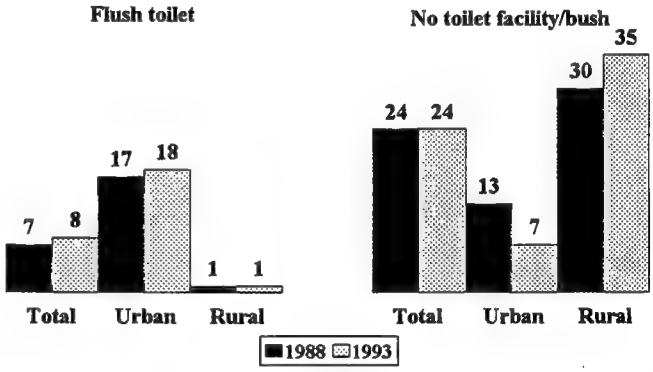


Percentage of women 15-49 living in households having amenity

Few rural households have access to piped water and electricity.

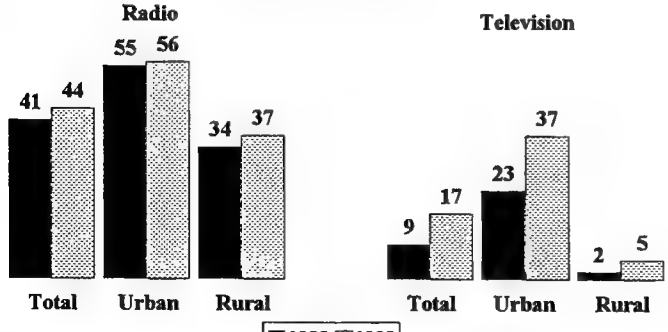
About 1 in 4 households has no toilet facility, and only around 1 in 12 households has a flush toilet.

Figure 3.2
Sanitary Facilities by Urban-Rural Residence
1988-1993



Percentage of women 15-49 living in households with sanitary facilities

Figure 3.3
Ownership of Radio and Television
by Urban-Rural Residence
1988-1993



Percentage of women 15-49 living in households owning a radio or television

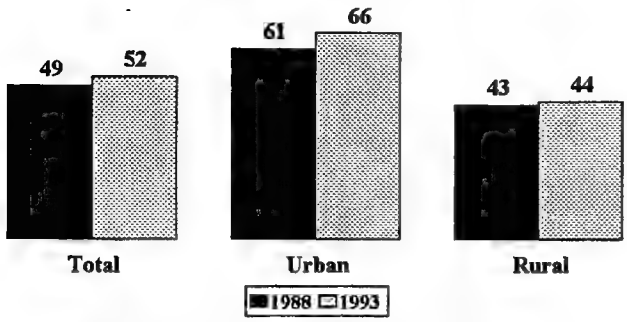
Household ownership of radios and, especially, televisions increased between 1988 and 1993.

Figure 3.4 shows the trends in the proportion of women in the childbearing ages who listened to radio every week. The results suggest that there was little change in the extent of women's exposure to radio broadcasts during the period between 1988 and 1993. Overall, 52 percent of women reported hearing a radio broadcast at least weekly in 1993 compared to 49 percent in 1988. Radio exposure levels increased somewhat more among urban residents than rural residents although the differences between the two surveys for both groups are small.

Ownership of Means of Transportation

In Ghana, ownership of a means of transportation is an indicator that a household has a relatively high living standard. Figure 3.5 indicates that the percentage of women 15-49 in households owning a car dropped from 6 percent in 1988 to 4 percent in 1993. The decline was especially notable in urban areas. Within the same period, ownership of bicycles rose from 11 percent in 1988 to 20 percent in 1993. The increase in bicycle ownership was greater in rural than in urban areas.

Figure 3.4
Exposure to Radio Broadcasts by Urban-Rural Residence
1988-1993

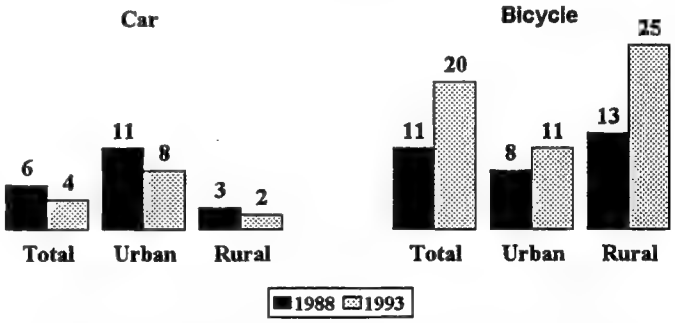


Percentage of women 15-49 listening to radio weekly

Between 1988 and 1993, there was little change in the proportion of women who regularly listened to radio broadcasts.

Ownership of bicycles increased rapidly in rural areas between 1988 and 1993.

Figure 3.5
Ownership of Means of Transport by Urban-Rural Residence
1988-1993



Percentage of women 15-49 living in households having a means of transport

4 Marriage Patterns

In Ghana, various types of marriages and unions exist, ranging from customary, civil, and religious marriages to a variety of informal unions. Childbearing is therefore not confined to marital unions, and there are both pre-marital births and births in informal unions. However, most births occur within marriages, making marriage an important indicator of the onset of the primary period of exposure to the risk of childbearing for the majority of women.

Never-married Women

In the GFS and GDHS, "marriage" was defined as a stable cohabitation between a man and a woman irrespective of whether or not any validating legal, religious or customary rites or ceremonies had been performed. Ghanaian women are delaying the age at which they establish a stable marital union. As Figure 4.1 shows, the proportion of women who had never married according to the survey definition has increased over time within each age group. The increases are especially striking for women under age 30. For example, between 1979 and 1993, the proportions never-married among women 15-19 increased from 69 percent to 78 percent. Among women 20-24, the proportion who had not yet married rose from 15 to 25 percent. The increase in the proportion never married represents a general tendency towards delaying the onset of exposure to the risk of pregnancy, which may partially account for the noticeable drop in fertility in the period (see Section 5).

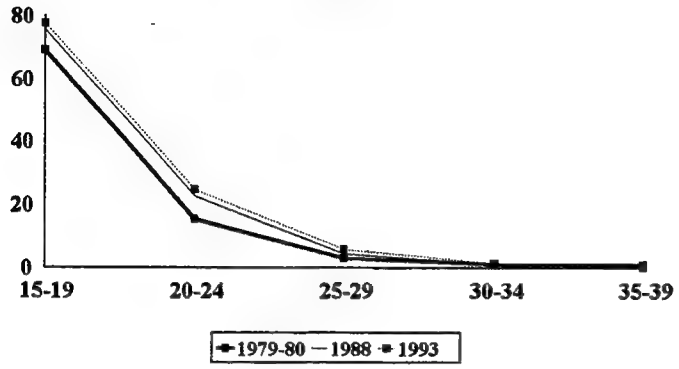
Median Age at First Marriage

One indicator that is used to explore trends in the timing of marriage is the median age at first marriage, i.e., the age by which 50 percent of women in a group were married for the first time. In Ghana, the median age at first marriage for women 25-49 years remained stable at 18 years between 1979/80 and 1988, but increased to 18.8 years by 1993 (Figure 4.2).

Urban women generally marry at a later age than their rural counterparts. Figure 4.2 indicates that the increase over time in the median age at first marriage has also been more pronounced among urban than rural women. The median age of first marriage for urban women increased from 18.2 years in 1979/80 to 18.5 years in 1988 and 19.5 years in 1993. For rural women, the median age at first marriage remained almost constant at 18 years in 1979/80 and 1988, before increasing to 18.6 years in 1993.

Figure 4.3 shows that there is a generally strong positive association between the age at which women first marry and the number of years of schooling they have attained. For example, in 1993, the median age at first marriage among women with 11 years or more of schooling was 23 years, more than 4 years greater than the median age among women who never attended school (18.5 years). The relationship between age at marriage and level of schooling is explained not only by the postponement of marriage because of attendance at school but by the fact that education also places a woman in a social situation in which early marriage becomes less attractive since the woman has other alternatives (further education, employment in the formal sector, etc.).

Figure 4.1
Percentage Never-Married by Age
Women 15-39
1979-1993



Women in Ghana are delaying the age at which they first marry.

The increase in the average age at first marriage has been greater for urban than for rural women.

Figure 4.2
Median Age at First Marriage by Urban-Rural Residence
Women 25-49
1979-1993

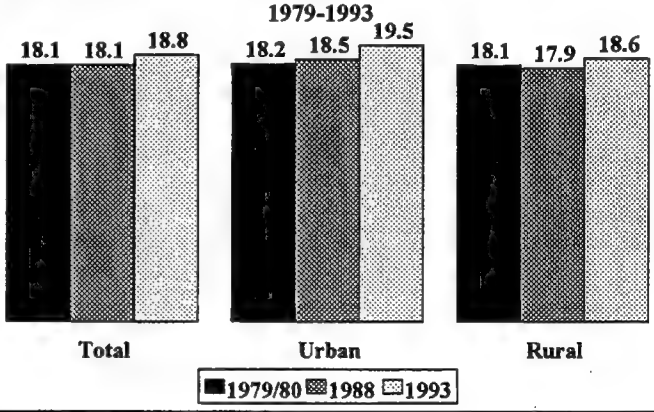
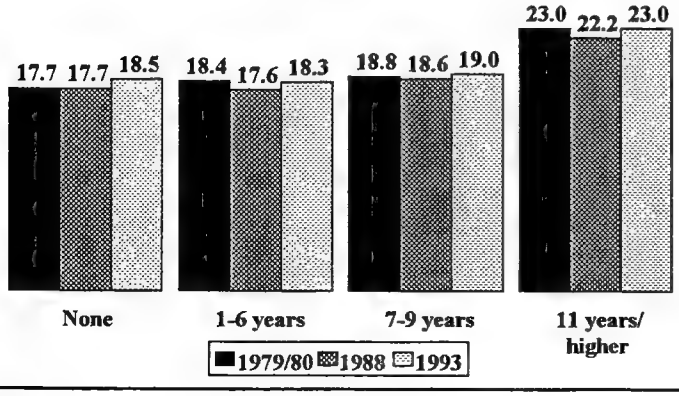


Figure 4.3
Median Age at First Marriage by Years of Schooling
Women 25-49
1979-1993



Increases in the age at marriage are due in part to gains in female education levels.

With regard to trends in the age at marriage, the results in Figure 4.3 show little evidence of an increase in the median age at first marriage during the period 1979-1988 within any of the education categories. Between 1988 and 1993, however, there were notable increases in the median age at first marriage among women at all educational levels.

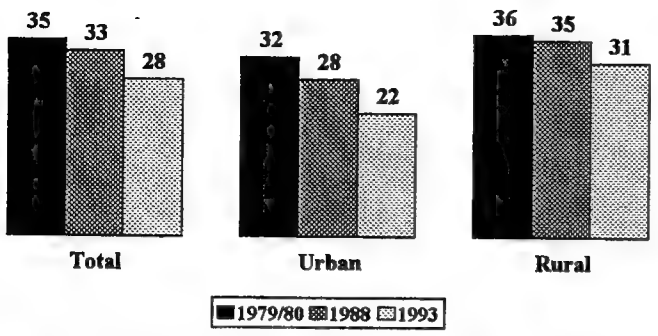
Prevalence of Polygyny

The extent of the practice of polygyny in Ghana was assessed in the 1979/80 GFS and the 1988 and 1993 GDHS surveys by asking married women whether their husbands had other wives, and, if so, the number of wives. One of the major linkages between polygyny and fertility is that polygyny provides women who may have otherwise remained single the opportunity to marry and hence contributes to a greater level of exposure to risk of pregnancy among women, especially those in the younger age groups, than might prevail in the absence of polygyny.

Overall, the level of polygyny fell from 35 percent in 1979-80 to 33 percent in 1988 and to 28 percent in 1993. Urban marriages are less likely to be polygynous than rural marriages. The proportion of polygynous unions also decreased more rapidly in urban than in rural areas between 1988 and 1993 (Figure 4.4).

Figure 4.5 shows that the level of polygyny in the country is negatively related to the woman's level of education. Generally, the level of polygyny within each educational category has declined over time, especially among women who have ever attended school.

Figure 4.4
Polygynous Unions by Urban-Rural Residence
1979-1993

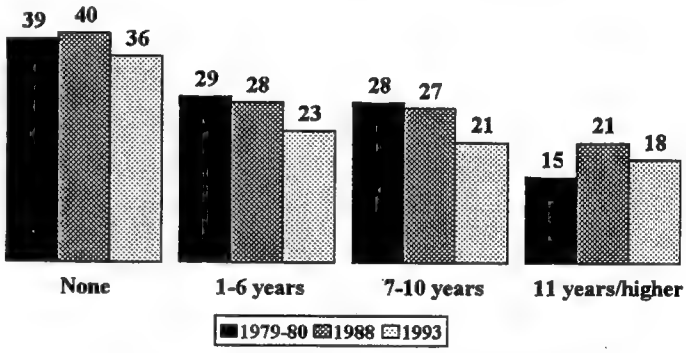


Percentage of currently married women 15-49 in polygynous unions

The level of polygyny has been falling steadily, with the pace of the decline faster in urban than rural areas.

The higher a woman's educational level the less likely she is to be in a polygynous union.

Figure 4.5
Polygynous Unions by Years of Schooling
1979-1993



Percentage of currently married women 15-49 in polygynous unions

5 Fertility

Data from the GFS and the two rounds of the GDHS can be used to assess changes in the fertility behavior. The results suggest that Ghana has begun the transition to lower fertility that is characteristic of more developed countries.

Total Fertility Rates

The total fertility rate (TFR) is an estimate of the average number of births a woman would have at the end of her reproductive years if she bears children at the prevailing age-specific fertility rates throughout her childbearing years. Figure 5.1 shows the trend in the total fertility rate based on results from the 1979/80 GFS, the 1988 GDHS, and the 1993 GDHS. These surveys show evidence of a continuous decrease in fertility. However, the pace of decline was much slower in the 1980s than in the current decade. Between the 1979/80 GFS and the 1988 GDHS, the TFR decreased from 6.5 to 6.4 births per woman. By the time of the 1993 GDHS, the TFR had fallen to 5.5 births, a drop in fertility of almost one child per woman from the level in 1988.

Total Fertility Rates by Residence

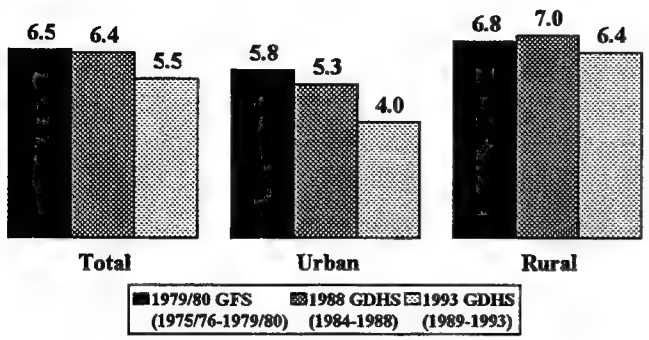
The trend in fertility between the 1979/80 GDHS and the 1993 GDHS differed markedly in urban and rural areas. There was a substantial fall in urban fertility levels during the period; the urban TFR in 1993 was 4 births compared with a level of 5.8 births at the time of the 1979/80 GFS. The fertility level for rural women remained almost constant throughout the period, falling by only 0.3 births between the GFS and the 1993 GDHS. As a result, the urban-rural differential in fertility has widened significantly over time, from one birth in the late 1970s to more than two births in the early 1990s.

Table 5.1 shows that fertility levels fell sharply in all regions of Ghana for which information is available to monitor trends. Despite the very rapid decline in childbearing, the TFR exceeded 5 births in all regions in Ghana at the time of the 1993 GDHS, except Greater Accra, where the TFR was 3.6 births.

Total Fertility Rates by Women's Education

Research has shown that women who are more educated tend to want and have fewer children than less educated women. A partial explanation offered for this pattern is that better educated women have higher expectations for their children and so plan to have fewer children in order to enable a greater investment in each child's well being and education. Those with better earning potential are also likely to value their time more highly and to appreciate the high "opportunity costs" of having a large family. Fertility levels were inversely associated with the number of years of school that the woman had attended, according to the results of all of the surveys. Considering the trend in fertility within educational categories, women with no schooling experienced only a relatively small decline in their fertility over the period between the 1979/80 Ghana Fertility Survey and the 1993 Ghana

Figure 5.1
Total Fertility Rates
by Urban-Rural Residence
1975-1993



At the time of the 1993 GDHS, women were having an average of 5.5 births, one birth fewer than at the time of the GFS in the late 1970s.

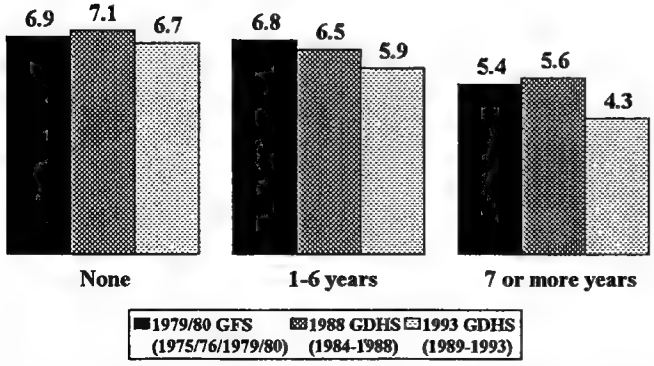
The Greater Accra Region had the lowest fertility level throughout the period.

Table 5.1
Total Fertility Rates by Region
1976-1993

Region	1979/80 GFS (1975/76-1979/80)	1988 GDHS (1984-1988)	1993 GDHS (1989-1993)
Western	7.1	6.6	5.5
Central	7.3	6.9	5.6
Greater Accra	5.1	4.8	3.6
Eastern	6.6	5.9	5.1
Volta	6.6	7.2	5.4
Ashanti	6.2	6.2	5.6
Brong Ahafo	6.7	7.1	5.5
Upper West, Upper East, and Northern	NA	7.3	6.8

NA-Not available

Figure 5.2
Total Fertility Rates by
Years of Schooling
1975-1993



Fertility levels have fallen more rapidly among women who had at least some education than among women who never attended school.

DHS. However, there were substantial decreases in fertility levels among women who had ever attended school, particularly during the period between the 1988 and 1993 surveys.

Median Age at First Birth

Women who have their first birth early tend to have a greater number of children than those who delay their first birth. The median age at which women started childbearing increased from 19.5 years to 20.2 years during the period between the 1988 GDHS and 1993 GDHS (Figure 5.3). The rise in the median age at first birth was evident among both urban and rural women. As a result, there was almost no change in the urban-rural differential in age at onset of childbearing. On average, rural women continue to start childbearing about one year earlier than urban women.

Adolescent Fertility

Research suggests that teenagers are more likely than older women to suffer from pregnancy-related complications which could claim their lives. Furthermore, adolescent pregnancy is risky not only for the young woman but for the child as well, particularly when these young mothers are not prepared adequately for the responsibilities of childbearing. Figure 5.4 shows that the level of teenage childbearing has declined over time. In 1979/80, 27 percent of teenage girls were pregnant with the first child or already mothers. By 1988, the level of teenage childbearing had fallen to 23 percent, and it reached 22 percent in 1993.

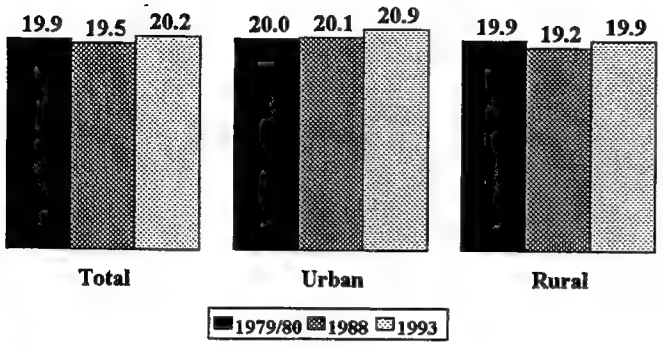
Marked differentials exist in the pattern of teenage childbearing by residence (Figure 5.4). In 1979/80, the proportion of teenage girls who were mothers or pregnant was similar in urban (28 percent) and rural (27 percent) areas. This pattern had changed by 1988 when 17 percent of urban teenage girls had begun childbearing compared to 27 percent of their rural counterparts. Between 1988 and 1993, however, there was comparatively little further change in the level of childbearing among either urban or rural teens.

Birth Intervals

A child's health status is related to the length of the preceding birth interval. Children born shortly after a prior birth are at greater risk of illness and death than those born after a long interval. Further, the occurrence of closely spaced births gives the mother insufficient time to restore her health, which may limit her ability to take care of her children.

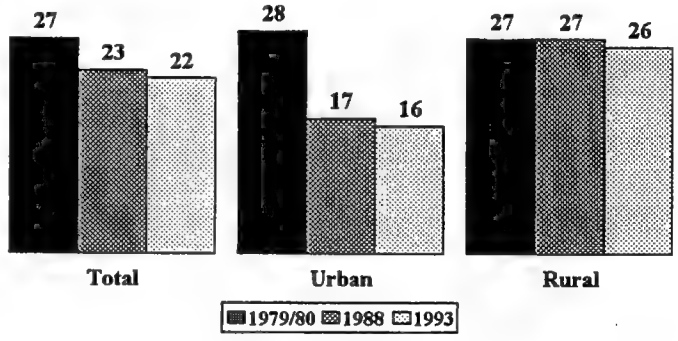
Figure 5.5 shows that the median birth interval increased from 33 months for births occurring during the five-year period before the GFS to slightly more than 36 months for births occurring during the five-year period before the 1993 GDHS. The median interval between births for urban and rural births was similar at the time of the GFS. However, reflecting the fall in urban fertility during the period, urban mothers were waiting an average of nearly 6 months longer for the next birth than rural mothers by the time of the 1993 GDHS.

Figure 5.3
Median Age at First Birth by Urban-Rural Residence
Women 25-49
1979-1993



The average age at the first birth has risen among both urban and rural women.

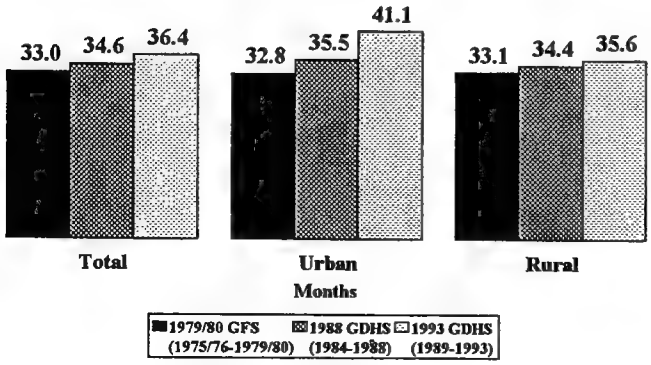
Figure 5.4
Adolescent Fertility
1979-1993



Percentage of women 15-19 who were mothers or pregnant with the first child

Teenage girls in urban areas are much less likely to have begun childbearing than rural teens.

Figure 5.5
Median Length of the Preceding Birth Interval by Urban-Rural Residence
1979-1993



Urban women are waiting an average of nearly 6 months longer than rural women to have the next birth.

6 Family Planning

Information on knowledge of, attitudes about, and practice of contraception is of particular interest to policy makers, programme managers and researchers concerned with planning and evaluating population and family planning interventions. In Ghana, the introduction of modern family planning activities as a public welfare service dates back to 1961 when the Christian Council of Ghana opened a Family Advice Center in Accra to offer advice on family planning and responsible parenthood to married couples. A second organized effort to promote fertility control began in 1967, when the Planned Parenthood Association of Ghana (PPAG) was set up with branches at various centres throughout the country. The most comprehensive and positive move on the part of the Government of Ghana to control population growth was in 1969, when Ghana became the first sub-Saharan African country to adopt a population policy. In pursuance of the objectives of the policy, a secretariat was established in 1970 to develop and operate a national family planning programme. A range of family planning services are currently offered at both government hospitals and clinics and facilities operated by non-governmental agencies.

Knowledge of Family Planning

Familiarity with contraceptive methods is among the prerequisites for the adoption of fertility regulation methods. Since the initiation of family planning programmes in Ghana, information about contraceptive methods has been disseminated through a variety of channels, including the mass media. An examination of GFS and GDHS data indicates that knowledge of family planning has increased over time, a result that is at least in part attributed to the information campaigns.

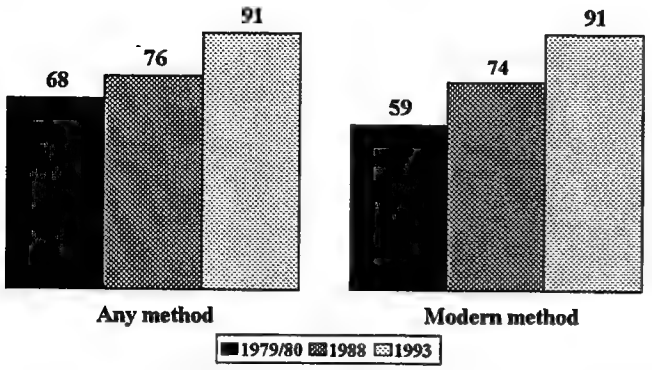
Figure 6.1 shows that contraceptive knowledge was already moderately high among women in Ghana in the early 1980s. According to the GFS, 68 percent of women knew some family planning method, and 59 percent recognized a modern method. By 1988, there was a further increase in the proportion of women who were familiar with contraceptive methods, with 76 percent of women knowing about at least some method and 74 percent knowing a modern method. Knowledge levels continued to increase between 1988 and 1993 when 91 percent of women reported they knew of at least one method and an identical percentage knew a modern method.

The pill was the most widely known modern contraceptive at the time of the 1979/80 GFS (47 percent) and the 1988 GDHS (60 percent). By 1993, Table 6.1 shows that the condom (80 percent) had become as widely recognized as the pill (79 percent). In addition, a majority of women in the childbearing ages knew about injectables (75 percent), female sterilization (67 percent), and rhythm/periodic abstinence (57 percent).

Ever Use of Family Planning

Figure 6.2 presents the percentage of all women who have ever used any method of contraception, which provides a measure of the cumulative experience with family planning use in a population. In

Figure 6.1
Knowledge of Contraceptive Methods
1979-1993



Percentage of all women 15-49 knowing about any contraceptive method

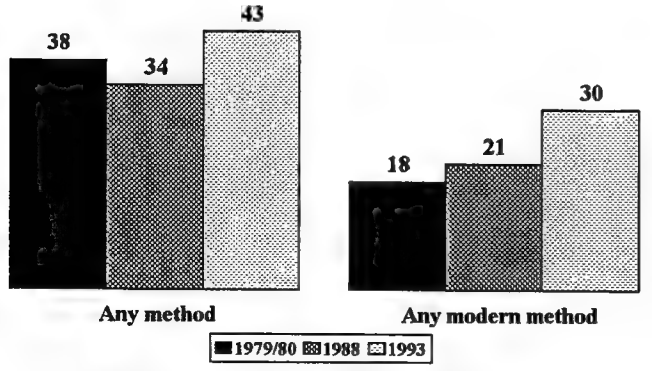
Nine in ten women in Ghana know about some family planning method.

Levels of knowledge increased between 1979 and 1993 for all methods.

Table 6.1
Knowledge of Specific Contraceptive Methods
All Women 15-49
1979-1993

Method	1979/80	1988	1993
Pill	47	60	79
IUD	33	37	45
Injection	22	43	75
Condom	30	49	80
Female sterilization	29	54	67
Male sterilization	4	11	21
Rhythm/Periodic abstinence	21	39	57
Withdrawal	19	31	52

Figure 6.2
Ever Use of of Contraceptive Methods
1979-1993



Percentage of all women 15-49 who have ever used any contraceptive method

By 1993, three in ten women in Ghana had ever used a modern contraceptive method.

Ghana, the proportion of women who have ever used any method of contraception stood at 38 percent in 1979/80. By 1993, the proportion had risen to 43 percent.

Current Use of Family Planning

The current use rate is a measure of actual contraceptive practice at the time of the survey interview. It takes into account all use of contraception, whether the concern of the users is with permanent cessation of childbearing or with achieving desired birth intervals. It is an important indication of the success of family planning programmes.

Among married women, Figure 6.3 shows that 20 percent of married women were using some method of family planning in 1993, and 10 percent were using a modern method. These figures are significantly higher than the levels in 1979/80 and 1988 when 12 percent and 13 percent of married women were reported respectively as using some method, and 7 percent and 4 percent, a modern method.

With regard to the method mix among users, women were somewhat more likely to have reported use of modern methods than traditional methods at the time of the 1979/80 and 1993 surveys, while the opposite pattern was observed in the 1988 GDHS (Figure 6.4). In all three surveys, the most popular modern method was the pill, while the majority of traditional method users reported relying on some form of rhythm/periodic abstinence. Although the overall levels of use of injectables and condoms remain below that of the pill in 1993, there were marked increases in the use of both these methods between 1988 and 1993.

Current Use of Family Planning by Selected Characteristics

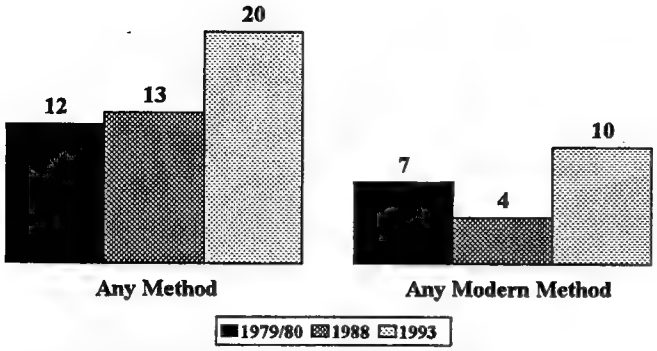
Urban-Rural Residence

At the time of the 1979/80 GFS, rural women were as likely as urban residents to be using some method of contraception. However, Figure 6.5 shows that a significant differential in the use of contraception had become evident by the time of the 1988 GDHS, with the level of current use higher among urban women (20 percent) than rural women (10 percent). A similar differential was observed again in the 1993 GDHS results, when 31 percent of urban women and 15 percent of rural women were reported as currently using contraception.

Region

The level of current use of contraception rose in all regions in Ghana during the period (Table 6.2). In absolute terms, Western and Brong Ahafo had the largest gains, while the growth in the current use level was smallest in the Eastern Region. Overall, at the time of the 1993 GDHS, the proportion of currently married women currently using any method was highest in Greater Accra.

Figure 6.3
Current Use of Contraceptive Methods
1979-1993

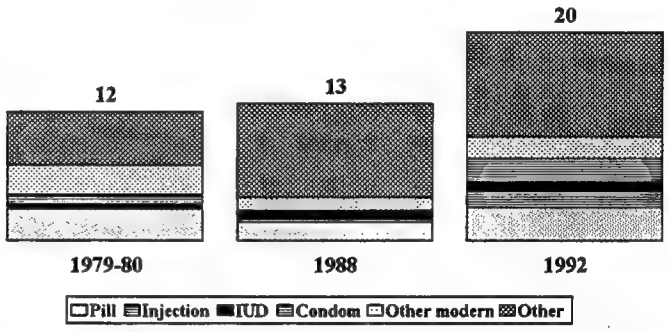


Percentage of currently married women 15-49 currently using any contraceptive method

In 1993, 20 percent of currently married women were using family planning, but only half of all users employed a modern method.

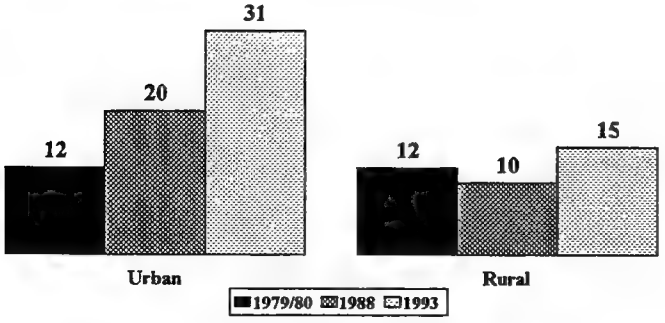
The pill is the most commonly used modern method, while periodic abstinence is the most widely used traditional method.

Figure 6.4
Current Use of Specific Contraceptive Methods
1979-1993



Percentage of currently married women 15-49 currently using any contraceptive method

Figure 6.5
Current Use of Contraceptive Methods
by Urban-Rural Residence
1979-1993



Percentage of currently married women 15-49 currently using any contraceptive method

In the late 1970s, rural women were as likely to be using contraception as urban women; by 1993, the use rate among urban women was twice the rural rate.

Women's Years of Schooling

Figure 6.6 presents trends in the current use of any contraceptive method according to the years of schooling women have attained. The results indicate that the levels of contraceptive use remained stable or increased only slightly during the period between the 1979/80 GFS and the 1993 GDHS for women who never attended school and those with 1-6 years of schooling. Among better educated women, there was a noticeable decline between 1979/80 and 1988, followed by a sharp increase in the use of contraceptive methods. Overall, in 1993, the percentage of married women using any contraceptive method increased with the number of years of schooling, from 8 percent among women with no education to 52 percent among women with 11 years or more of education.

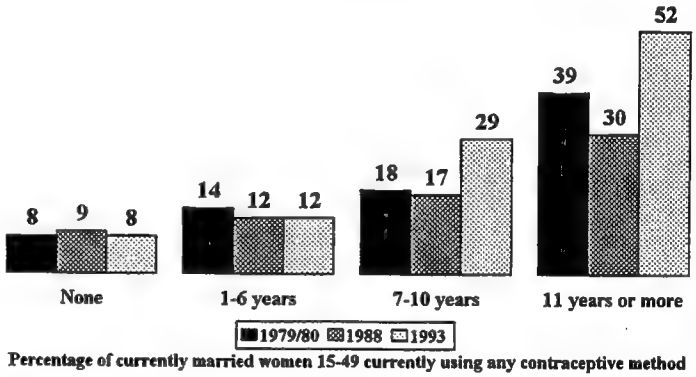
Table 6.2
Current Use of Contraceptive Methods by Region
Currently Married Women 15-49
1979-1993

Region	1979/80	1988	1993
Western	11	8	26
Central	6	10	16
Greater Accra	24	27	37
Eastern	21	11	25
Volta	20	15	26
Ashanti	9	10	14
Brong Ahafo	10	12	25
Northern, Upper East, and Upper West	2	11	10

Greater Accra has consistently had higher rates of contraceptive use than other regions.

Between 1979 and 1993, there was little change in use rates among women with less than 7 years of schooling.

Figure 6.6
Current Use of Contraceptive Methods by Years of Schooling
1979-1993



Percentage of currently married women 15-49 currently using any contraceptive method

7 Fertility Preferences

A major reason for the establishment of the Ghana National Family Planning Programme was to reduce the level of unmet need for family planning, particularly among high-risk families. Thus, it is important to understand the extent of the desire to control fertility in the country, whether for spacing or limitation.

Desire for Children

The trend in the percentage of married women wanting no more children provides the clearest evidence of the profound shift in childbearing aspirations which is taking place in Ghana. Figure 7.1 shows that the changes in the desire for more children were shared by both urban and rural women. At the time of the 1979/80 GFS, for example, comparatively few women—11 percent—expressed a desire to avoid future births. By 1993, the proportion wanting no more children had tripled among both urban and rural women.

An increase in the percentage of women wanting no more children was observed in all of the major regions in Ghana (Table 7.1). By 1993, more than 40 percent of women in the Greater Accra and Eastern regions said that they wanted no more children. The proportion desiring to have no more children exceeded 30 percent in all of the other regions except the Northern and Upper East and West regions, where 17 and 24 percent, respectively, reported that they wanted to avoid further childbearing.

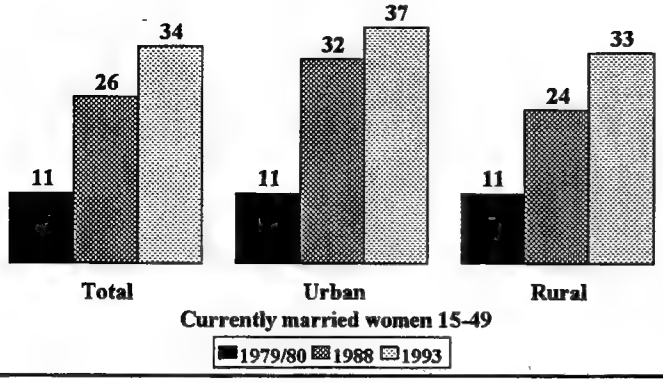
The proportion of women who wanted no more children increased substantially between the 1979/80 GFS and the 1993 GDHS within all educational groups. For example, Figure 7.2 shows that among women who never attended school, only 11 percent reported they wanted no more children at the time of the 1979/80 GFS. By the 1993 GDHS, 32 percent of women without any formal education expressed a desire to limit further childbearing. In general, similar increases in the desire for no more children were observed in each of the other educational categories, with the increase being most rapid among women who had achieved the greatest number of years of schooling.

Ideal Family Size

The family size that women regard as ideal provides another important indicator of changing fertility attitudes. To obtain information on the ideal family size, respondents were asked in all three surveys to consider a hypothetical situation independent of their current family size and to declare the number of children they would choose to have if they could start their reproductive years again.

During the period 1979/80 to 1993, there was a noticeable decline in the average family size reported as ideal (Figure 7.3). Overall, the average ideal family size for currently married women declined from 5.9 children in 1979/1980 to 4.7 children in 1993. When the ideal family size in 1993 is compared to the total fertility rate (5.5. births), it is clear that, on average, women are having consistently more children than they consider ideal.

Figure 7.1
Desire for No More Children by Urban-Rural Residence
1979-1993



The proportion of women expressing a desire for no more children tripled between 1979 and 1993.

Women in the Northern and Upper East/Upper West Regions are less likely than other women to want to limit childbearing.

Table 7.1
Desire for No More Children by Region
1979-1993
Currently married women 15-49

Region	1979/80	1993
Western	13	31
Central	7	38
Greater Accra	19	41
Eastern	11	43
Volta	14	39
Ashanti	11	37
Brong Ahafo	15	36
Northern	4	17
Upper East/ Upper West	3	24

Note: includes sterilized women

Figure 7.2
Desire for No More Children by Years of Schooling
1979-1993

Note: includes sterilized women

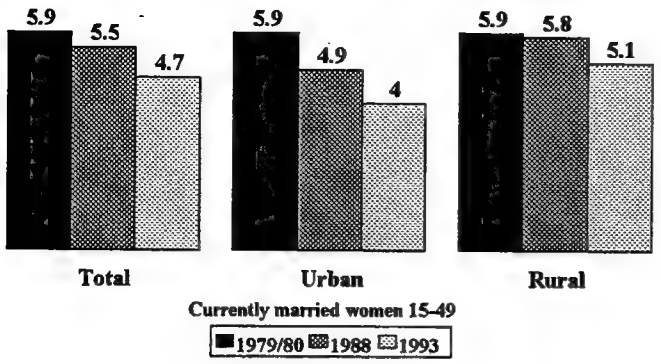
In 1993, nearly one-third of women with no education said that they did not want more children.

All major population subgroups shared in the declines in average desired family size. For example, Figure 7.3 shows that the mean ideal family size decreased substantially among both urban and rural women during the period 1979/80 to 1993. By 1993, urban women considered 4 children as ideal while rural women wanted an average of 5.1 children. This compares to the average of 5.9 children both groups considered ideal at the time of the 1979/80 GFS.

Table 7.2 indicates that, at the time of the 1979/80 GFS, the average ideal family size exceeded 5 children in all regions except Greater Accra (4.9 children). By 1993, the family size women considered ideal exceeded 5 children in only the Northern Region (6.7 children) and the Upper East/Upper West Regions (5.9 children). In Greater Accra, women wanted an average of 3.7 children.

Figure 7.4 shows that, overall, the family size women considered ideal decreased sharply within all educational categories. Despite these changes, there continued to be significant differentials in the mean ideal family size according to the woman's years of education throughout the period; in 1993, the average ideal family size reported by women who never attended school was nearly 2 children higher than the ideal among women who had 11 years or more of schooling.

Figure 7.3
Mean Ideal Family Size
by Urban-Rural Residence
1979-1993



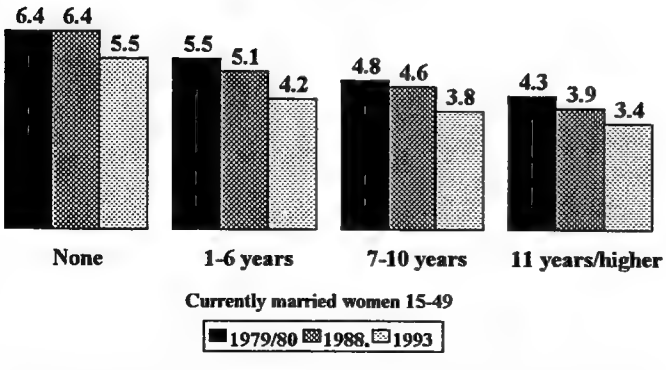
Urban women want fewer children than rural women.

In 1993, the average ideal family size ranged from 3.7 children in Greater Accra to 6.7 children in the Northern Region.

Table 7.2
Mean Ideal Family Size by Region
1979-1993
Currently married women 15-49

Region	1979/80	1993
Western	5.7	4.2
Central	6.0	4.2
Greater Accra	4.9	3.7
Eastern	5.9	4.3
Volta	5.7	4.2
Ashanti	5.8	4.5
Brong Ahafo	6.2	4.8
Northern	7.7	6.7
Upper East/Upper West	6.9	5.9

Figure 7.4
Mean Ideal Family Size by
Years of Schooling
1979-1993



The average ideal family size decreases with the educational level of the woman.

8 Child Health Indicators

Improving the health of children has been a continuing goal of Ghana's national health programme. Results from the three surveys can be used to assess the extent of progress in improving the health situation among young children.

Early Childhood Mortality

The mortality level of a society is closely linked to the health and well being of the population. Of all mortality measures, infant and child mortality are seen as among the most important indications of how well a society meets the needs of its people.

Although current levels of both infant and child mortality in Ghana remain unacceptably high, the survey results show that progress has been made in reducing the levels of both infant and child mortality. Figure 8.1 documents the recent downward trend in mortality levels among young children. The figure shows that, of every 1,000 babies born in the 5-year period preceding the 1993 GDHS, 66 died during their first year of life. This is nearly 11 deaths below the corresponding estimate for 1988 GDHS (77 per 1000 live births).

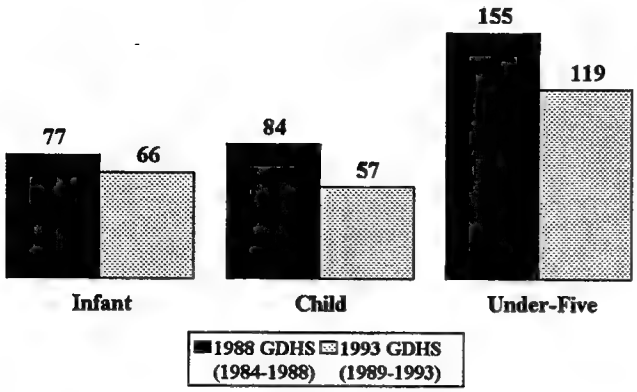
Under-five mortality levels also improved, falling from 155 deaths per 1000 live births in 1988 to 119 in 1993. This may be the result of a more effective control of infections and parasitic diseases, which are the main causes of under-five mortality.

Immunization

Immunization against childhood diseases contributes to reductions in mortality, morbidity and permanent disability among children. To combat the six major childhood diseases (tuberculosis, diphtheria, pertussis, polio, tetanus and measles), Ghana has launched an Expanded Programme on Immunization to reduce the incidence of vaccine preventable diseases by 50 percent by the year 2000.

Figure 8.2 shows the percentages of children aged 12 to 23 months who received full vaccination during 1988 and 1993. The data shows that the level of vaccination increased from 47 percent in 1988 to 55 percent in 1993. The figure also shows that coverage levels rose in both urban and rural areas during the period 1988 to 1993 although urban children continue to enjoy an advantage in immunization coverage levels over rural children. Similarly, the positive association between immunization rates for young children and the education levels for their mothers continues to be very evident despite the increase in coverage levels which have occurred among children in all categories over time.

Figure 8.1
Infant, Child and Under-five Mortality
1988-1993



Between 1988 and 1993, significant progress was made in reducing mortality levels among young children.

The percentage of young children who were fully immunized rose from 47 percent in 1988 to 55 percent in 1993.

Figure 8.2
Percentage of Children 12-23 Months Fully Immunized
1988-1993

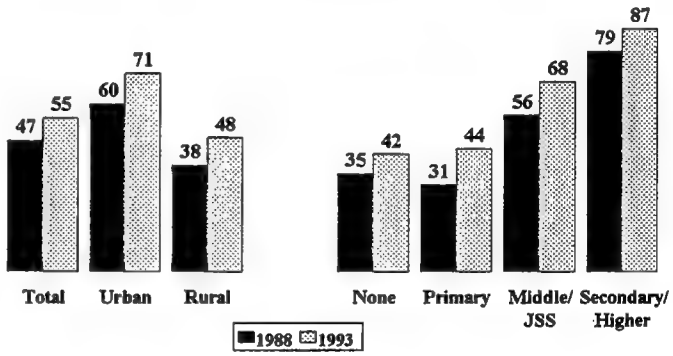
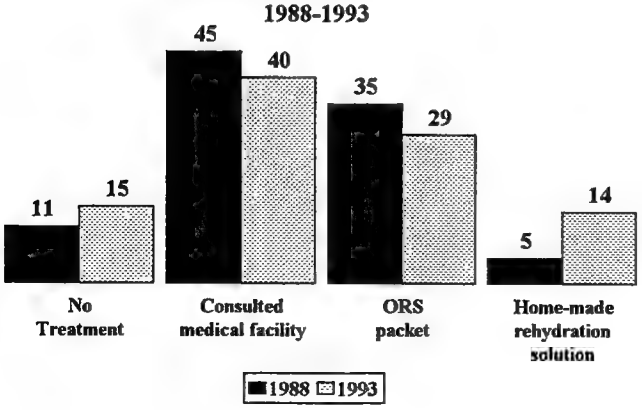


Figure 8.3
Treatment for Diarrhoea among Children under Age Three
1988-1993



Most children receive treatment when they are ill with diarrhoea.

Treatment of Childhood Diseases

Dehydration associated with severe diarrhoea is recognized as a major cause of morbidity and even death among young children. It is preventable by the early administration of rehydration solutions. These solutions are either prepackaged Oral Rehydration Salts (ORS) or a home-made solution of sugar, salt and water.

Figure 8.3 indicates that, among children who had diarrhoea, the majority receive at least some treatment. However, 12 percent of the children with diarrhoea in 1988 and 15 percent in 1993 had no treatment. Among the children who were treated, there was trend toward reduced use of rehydration solutions prepared with ORS packets and increased use of homemade solutions. Thirty-four percent of children with diarrhoea were treated with ORS in 1988 compared to 29 percent in 1993. The proportion of children given home-made rehydration solutions rose from 6 percent in 1988 to 14 percent in 1993.

Malaria is endemic to Ghana and is among the most common causes of morbidity among children. To obtain some indication of the approaches used in treating malaria, mothers were asked in both rounds of the DHS surveys about whether their young children had a fever in the two weeks before they were interviewed and, if yes, what they had done to treat the fever. In 1988, among the children under age 3 with fever, 56 percent were taken to a health facility while 4 percent had no treatment at all. In 1993, 45 percent of children with fever were taken to a health facility compared with 5 percent who received no treatment (Figure 8.4). The proportion of children with fever who were given anti-malarials increased sharply from 25 percent in 1988 to 65 percent at the time of the 1993 survey.

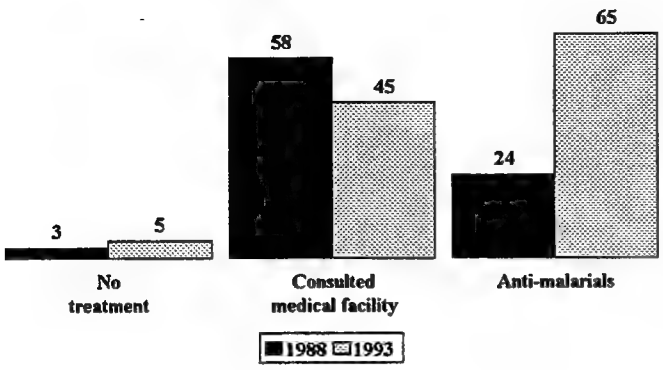
Both rounds of the GDHS also obtained information on the prevalence of cough with rapid breathing and the treatment of these symptoms of acute respiratory infection among young children. Figure 8.5 shows that mothers reported some effort to treat the illness in most cases. Significantly, the percentage of cases in which the mother reported that a health facility was consulted when a child was ill with a cough accompanied by rapid breathing decreased from 52 percent to 40 percent between 1988 and 1993.

Nutritional Status of Children

Nutritional status is an objective indicator of children's overall health and well-being. Childhood undernutrition results mainly from prolonged and improper treatment of illness as well as inadequate food intake. Undernourished children are at greater risk of dying than well-nourished children.

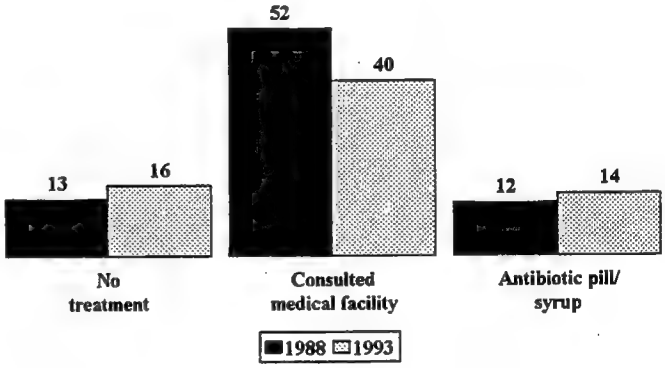
The two rounds of the GDHS obtained measures of both the height and weight of children in order to assess their nutritional status. Children whose height for age is more than two standard deviation below the median for an international reference population are described as stunted and those with a weight-for-height index more than two standard deviations below the median for the reference group are referred to as wasted.

Figure 8.4
Treatment of Fever among Children under Age Three
1988-1993



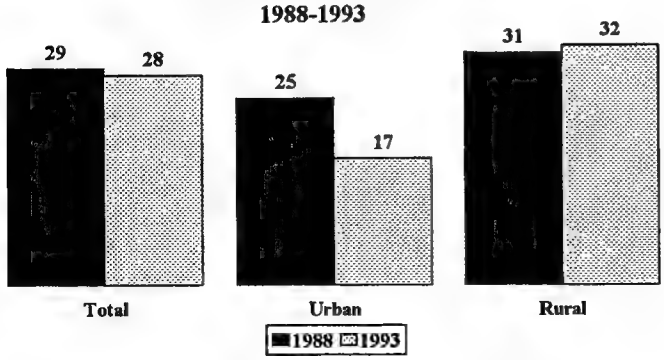
The use of anti-malarials to treat fever among young children increased rapidly between 1988 and 1993.

Figure 8.5
Treatment of Acute Respiratory Illness among Children under Age Three
1988-1993



Fewer than half of all children with acute respiratory illnesses are taken to consult a medical provider.

Figure 8.6
Level of Stunting among Children Age 3-35 Months by Urban-Rural Residence
1988-1993



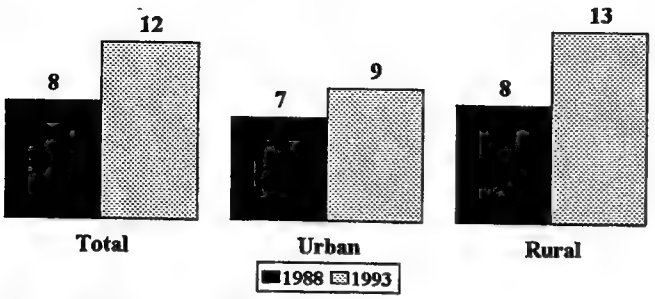
Note: Moderate to severe wasting is height-for-age below -2 standard deviations from the reference median.

Rural children are more likely than urban children to be stunted or too short for their age.

Figure 8.6 shows that similar percentages of children under 3 years were too short for their age (i.e., stunted) in 1988 and 1993. The level of stunting was higher among rural than urban children at both points in time.

In terms of weight for height (i.e., wasting), Figure 8.7 indicates that 8 percent of children under 3 years were too thin for their height (wasted) in 1988 compared with 12 percent in 1993. An examination of urban-rural trends in the proportion of children aged 3-35 months who were moderately to severely wasted reveals a small increase in the proportion who were considered as wasted, from 8 percent in 1988 to 12 percent for urban children. The situation of rural children also worsened slightly, with the proportion reported as wasted rising from 8 percent in 1988 to 13 percent in 1993.

Figure 8.7
Level of Wasting among Children Age 3-35 Months by Urban-Rural Residence
1988-1993



Note: Moderate to severe wasting is weight-for-height below -2 standard deviations from the reference median.

In 1993, more than one in ten children was wasted or too thin for his or her height.

9 Maternity Care

The survival chances of children are improved if mothers use maternity care services particularly antenatal and delivery care. There is evidence to support the benefits of the use of these health services to the mother as well.

Antenatal Care

Antenatal care involves a variety of preventive interventions, including tetanus toxoid immunizations, nutrition education, and postpartum family planning. It also offers the opportunity to health care providers to identify and monitor women who meet known risk criteria and to detect and manage pre-existing and new problems.

Figure 9.1 indicates that the majority of Ghanian women receive at least some prenatal care, and that the proportion of women who received antenatal care did not change substantially between 1988 and 1993. At the time of both surveys, rural women were less likely to receive antenatal services than their counterparts in the urban areas. For example, in 1993, the proportion of rural births in which the mother received no care during pregnancy was 16 percent compared to 3 percent of urban births.

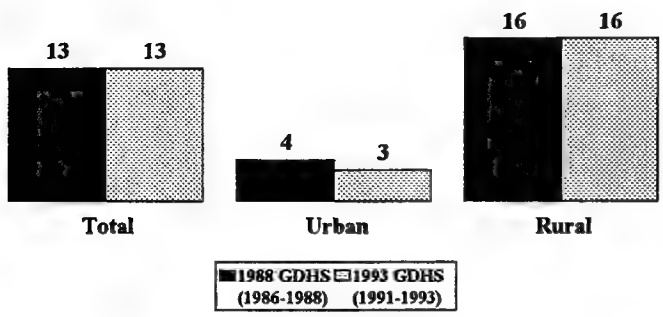
Most women who receive antenatal care see a trained health professional. In both rural and urban areas, Figure 9.2 shows that antenatal care services are received from trained nurse/midwives for the majority of births. The proportions who see doctors for their care is significantly greater for urban births than rural births. The proportion seeing a doctor also increased between 1988 and 1993 for urban births while it decreased for rural births.

The more educated a mother is the more likely it is that she will receive at least some antenatal care and the more likely it is that a doctor will provide the care she receives (Figure 9.3). With regard to trends in antenatal care, the proportion of births receiving antenatal care from a trained health provider showed small increases among births to mothers in all of the education categories. Looking only at care from doctors, however, the proportion of births for which care was received from a doctor increased only for births to women with at least 7 years of schooling, and the increase was substantial only among women with at least 11 years of schooling.

Delivery Assistance

When a trained provider with adequate access to medical facilities attends to women during labour and delivery, they are in a better position to manage any complications that may arise. This can significantly reduce the risks of morbidity and mortality for both the mother and the child.

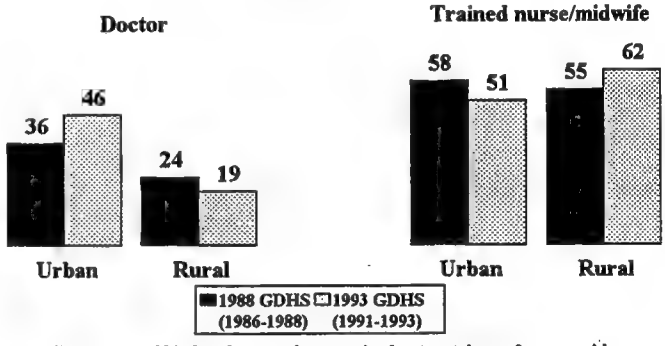
Figure 9.1
Percentage of Births Whose Mother Received No Antenatal Care by Urban-Rural Residence
1988-1993



The majority of women in Ghana receive some antenatal care.

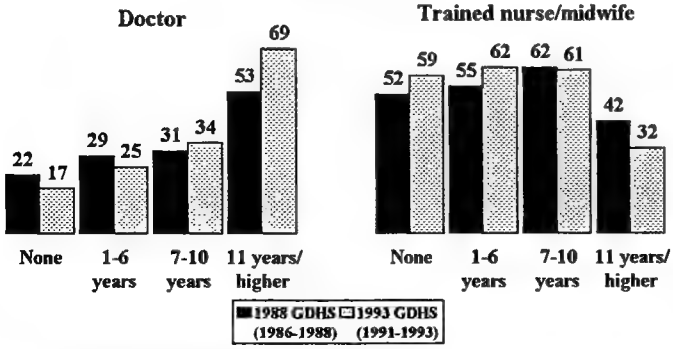
Urban women are more likely than rural women to see a doctor for antenatal care.

Figure 9.2
Antenatal Care Services from Medical Providers by Urban-Rural Residence
1988-1993



Percentage of births whose mothers received antenatal care from provider

Figure 9.3
Antenatal Care Services from Medical Providers by Years of Schooling
1988-1993



Percentage of births whose mothers received antenatal care from provider

Fewer than one in five women with no schooling sees a doctor for antenatal care.

Overall, women reported having some assistance at delivery in more than 90 percent of the births prior to the 1988 and 1993 DHS surveys. For many of the births, however, the assistance is provided by traditional birth attendants or relatives or friends.

Figure 9.4 shows that fewer than half of the births during the three-year period before the 1988 were assisted by a doctor or a trained nurse/midwife. Moreover, the proportion with medical assistance at delivery increased only slightly during the period between the surveys, from 41 percent in the 1988 DHS to 44 percent at the time of the 1993 DHS. Urban births are more likely to be assisted by trained providers than rural births.

Figures 9.5 indicates that births to highly educated women are much more likely than other births to have been attended by a doctor. Increases in the proportion of births assisted by physicians between the 1988 and 1993 surveys were largely concentrated among births to mothers with 11 or more years of schooling.

Tetanus Toxoid Injections

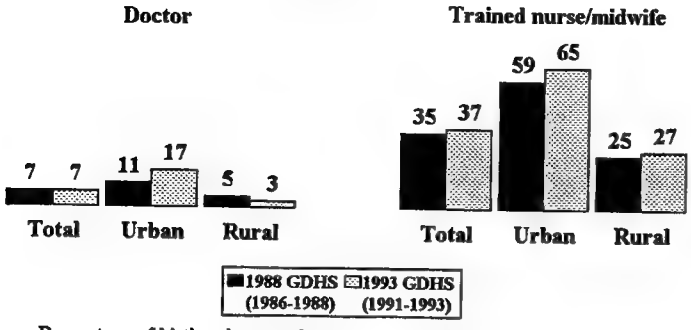
The World Health Organization recommends that all women receive two tetanus toxoid injections during their first pregnancy, a third dose 6 to 12 months later or during the next pregnancy, a fourth dose at least a year later or during the subsequent pregnancy, and a fifth dose at least one year later or during the subsequent pregnancy. The fifth dose is thought to provide life-long protection. Tetanus toxoid is thus a fundamental component of an effective antenatal care.

Figure 9.6 illustrates the proportion of births whose mothers received at least one tetanus toxoid injection during pregnancy. In general, urban women were more likely to receive the tetanus toxoid than rural women. For example in 1993, mothers received at least one dose of tetanus toxoid in the case of 91 percent of urban births compared to 71 percent for rural births.

High-risk Births

Research has shown that there is a strong association between maternal fertility patterns and children's survival risks. Typically, children are more likely to die in early childhood if they are born to mother who are *too old* (more than 34 years), *too young* (under 18 years), if they are born after *too short* an interval (less than 24 months after a prior birth) or if they are of *high birth* order. Many births in Ghana are to women in these high-risk categories. The country's maternal care programs seek to reduce the numbers of births in these "high-risk" categories, especially by encouraging the use of family planning to prevent unwanted pregnancies or to space desired births.

Figure 9.4
Assistance at Delivery from Medical Providers by Urban-Rural Residence
1988-1993

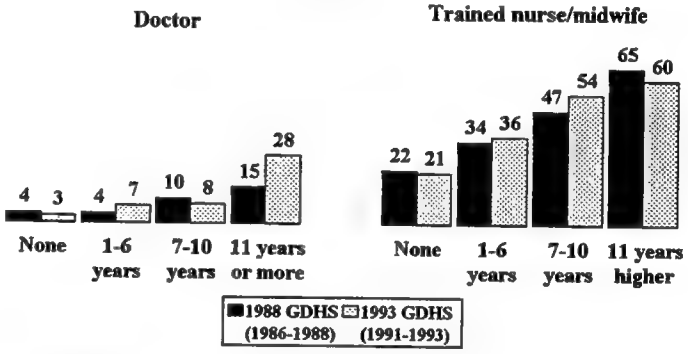


Percentage of births whose mothers were assisted at delivery by provider

Fewer than half all births are assisted at delivery by a trained medical provider.

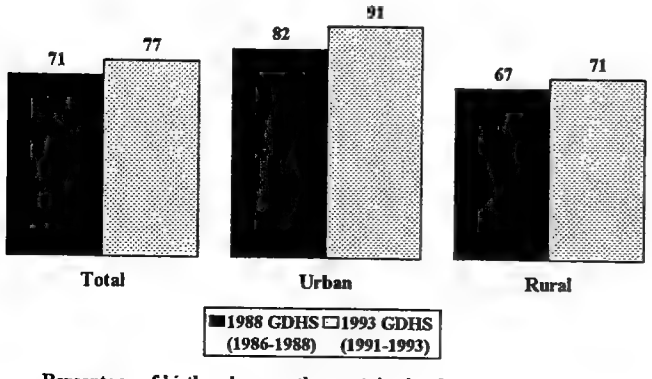
The higher a woman's educational attainment the greater is the likelihood that she will be assisted at delivery by a trained provider.

Figure 9.5
Assistance at Delivery from Medical Providers by Years of Schooling
1988-1993



Percentage of births whose mothers were assisted at delivery by provider

Figure 9.6
Tetanus Toxoid Vaccination by Urban-Rural Residence
1988-1993

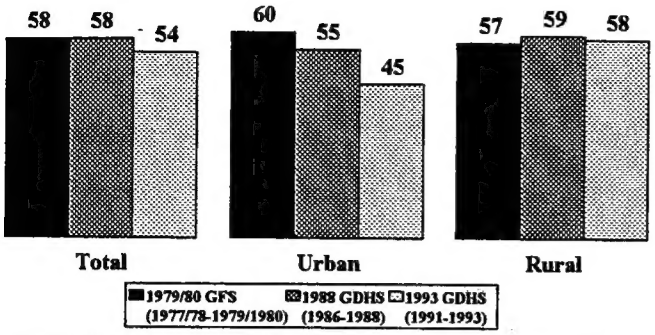


Percentage of births whose mothers received at least one injection

Urban women are more likely than rural women to receive a tetanus toxoid injection.

Figure 9.7 shows that the proportion of births which fall into these high-risk categories has begun to fall in Ghana, especially in urban areas. Nevertheless, during the five-year period prior to the 1993 GDHS, more than half of all births were in one or more of the high-risk categories.

Figure 9.7
Births in High-Risk Categories by Urban-Rural Residence
1988-1993



Note: Includes births whose mothers are too old or too young, high order births and births following short intervals

More than half of all births are to women in categories in which the risk of mortality for the baby is higher than average.

Appendix A

Data Sources

1979/80 Ghana Fertility Survey (EFS) – The GFS was conducted by the Central Bureau of Statistics under the auspices of the World Fertility Survey program. The survey covered a nationally representative, self-weighting sample of households. During the 1979/80 GFS, interviews were completed with 6,001 households and 6,125 eligible respondents. Eligible respondents include women age 15 to 49 years.

1988 Ghana Demographic and Health (GDHS) – The 1988 GDHS was the first of two surveys conducted under the auspices of the Ghana Statistical Service (formerly the Central Bureau of Statistics) as part of the international Demographic and Health Surveys program. The sample for the survey was a nationally representative, self-weighting sample of households in which all women 15-49 were eligible for interview. During the 1988 GDHS, interviews were completed with 4,406 households and 4,488 women.

1993 Ghana Demographic and Health (GDHS) – The 1993 GDHS was the second of the surveys conducted under the auspices of the Ghana Statistical Service as part of the international Demographic and Health Surveys program. The sample was a stratified, self-weighting of households in which all women 15-49 were interviewed. During the 1993 GDHS, interviews were completed with 5,822 households and 4,562 women.

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